## MARKET DISTRIBUTION—DISCUSSION

G. N. Lauman: These papers so thoroughly illustrate a point made by both speakers that it might be suspected that the authors had counseled with each other, were there not more fundamental reasons for their agreement. They are agreed that much serious effort must be put on the study of the marketing question in order to reduce the cost of living. Mr. Meeker dwells on the cost of transportation and Mr. Weld tells us this item is insignificant. That the marketing of agricultural products has met with the same difficulties non-agricultural products have encountered is apparent. I gather from Mr. Meeker's paper that the attempts to correct any abuses, particularly those of transportation, have not been made fast enough to suit him and that their ultimate solution cannot be hoped for along the lines followed. He therefore suggests the radical postage-stamp rate of transportation as the solution.

In suggesting this service he does not seem to realize that he is tampering with natural conditions on the one hand, and that on the other hand he proposes to compel the farmers adjacent to the large centers of consumption to produce all that these centers need, particularly of perishable products. How much of the yearly family budget is involved in the cost of highly perishable products? Flour, eggs, potatoes, beans, peas, apples, butter, excluding milk, and meat comprise the main items. Cauliflower should be grown around Washington, according to Mr. Meeker, of the same grade as that of eastern Long Island. Nature for the most part and man in a lesser degree provided that the development of cauliflower growing in this country should be otherwise. Agriculture the world over is constantly adjusting itself to national and international development. If we see any definiteness in this development, it is that everywhere the natural forces are being depended on more and more because these are the cheapest elements of production. Added to this, the constantly cheapening cost of transportation ought to give, theoretically at least, a practical solution of our problem in so far as it depends on these factors. Mr. Weld points out that the great staples and less perishable products are handled with less cost between the producer and consumer than the more perishable products. May it not be that our chief difficulties lie in just this field? It is here that the organization of the producers, with a complete system of

information, can work to good effect for both producers and consumers. There must always be greater differentials and variable prices in the more perishable products than in those capable of storage. The speculator and the commission man have here their greatest opportunities.

I am not convinced from these papers that the problem of the middleman is not very bad. Mr. Weld argues in one instance for more of them. May it not be that the East has more trouble with this question than the West; that the older the community the more likely it is to have a greater development of the unnecessary middleman? Mr. Weld does not cite extreme cases, yet many such could be cited, and the burden became so great in just such cases that the producers were finally driven to drastic remedies. No better case could be cited than in the adjoining New Jersey county of Monmouth, where the producers have successfully eliminated four middlemen and in a few years have taken over business running into the millions.

With the problem of public markets, where the ultimate producer and consumer are to meet, we come face to face with much irrational and radical suggestion, particularly from the cities. In the present trend of development of society, it does not seem to me that we can eliminate the corner grocery or its equivalent. It saves time if nothing else. It is constantly available to supply our wants, it even grants us credit to the next pay-day. Will the public market do this and more? The public market with proper storage in the large centers may be a cheaper solution of the problem of supplying the ultimate middleman. The public market reaches but a small number of the population. The tendency in growing cities with public markets is for the producer to be replaced by a middleman supplying his needs from the constantly increasing produce yards or docks of our great transportation companies. To me the present solution of this problem is either the chain-store system or consumers' coöperation. One has only to study the English and continental coöperative stores to realize that they are not only an economic force felt in the humblest home but a moral force without a parallel in such combination.

Mr. Weld has pointed out the already great significance of coöperation among producers in Minnesota. The hope of the farmer in this problem of better prices for his products lies in coöperation with his associates similarly situated. Though perhaps not a model in all respects, yet the history and development

of the California citrus growers organization show what can be done by enlightened leaders and business men who are producing a product which must be marketed more than a thousand miles away. It may be true that in Minnesota less encouragement and more direction is needed with these coöperative organizations, yet in the vast majority of states education in the principles and methods of coöperation is greatly needed not for the purpose of creating mushroom organizations, as is done in a state not 200 miles away, but to prepare the ground that the people shall when necessity demands be able to develop an indigenous organization, and not one led by an officeholder at Trenton or Annapolis or Albany. The high death rate of these organizations pointed out by Mr. Meeker is due to the insufficient basis, economic, educational, and moral, upon which they are founded. The difficulties are aggravated by the very quality developed by agriculture which in other respects is so admirable—that of independence.

To me a stronger showing up of the farce of expecting the parcel post to solve this great marketing problem would have been welcome. The deliberate attempt made by government press bureaus to mislead the general public seems almost to indicate some other motive than pure public service. A study of the results of the parcel post in Europe shows that for very limited quantities of (as a rule) high grade products for a special trade the post office can be an aid.

Both papers have pointed out the need of state and federal aid in solving marketing problems, and both have shown the weaknesses here to be encountered. As we read the history of coöperation where it has been most successful, we realize how much has been done by the people themselves without government aid and even in spite of governments. The result has been, particularly in consumers' coöperation, that they have successfully kept down the cost of living and under war conditions have steadied prices, particularly in England. If we are to have a development of coöperation in this country, let us hope that it comes from a deep and conscious desire to solve our own problems with as little government aid as possible.

Selden O. Martin: It is gratifying to see the subject of Market Distribution on the program of the American Economic Association. It is none too soon. For seven years the course

on marketing in the Graduate School of Business Administration of Harvard University has been considered pivotal by the faculty of the School, many of whom are members of this Association.

The title of the course has evolved from first "Economic Resources of the United States," to next "Commercial Organization-Domestic," and finally to the present title of "Marketing," just plain marketing, the buying and selling of things. But from the first, under whatever name, problems of marketing have been the center of interest and study in the School. The making of things and the buying and selling of things are the two great central functions of business. All other activities of business—transportation, banking, accounting, whatever they may be—are functions auxiliary to these main functions. With the present-day operation and correlation of these functions I believe every economist should be acquainted.

In a note for the AMERCIAN ECONOMIC REVIEW for December, 1913, on the Harvard Bureau of Business Research, I ventured to say that from the point of view of the economist business might be called applied economics and that the movement at Harvard for research in business was but a part expression of the feeling, among the younger generation of economists at least, that much more inductive study of present economic processes was desirable before further large constructive work in economic theory was attempted. Really the business man and the economist are studying the same subject, though their points of view are different. The business man is interested in results and consequently in the mechanism that produces the results. The economist is interested in the reasons for the mechanism and the results. But is not his appraisal of reasons apt to be more accurate if based on an intimate knowledge of mechanism?

Dr. Meeker in a broad deductive way has attacked the existing organization for marketing. But he has also very properly pointed out difficulties in certain stock reforms suggested. Dr. Meeker has also emphasized as a step toward solving the marketing problem reform in transportation service and rates. There is undoubtedly room for improvement in the transportation of commodities, but after all even the present transportation cost is but a small part of the final price of the commodity. Dr. Weld in his thoughtful paper reports that the transportation cost of a pound of butter from Minnesota to New York, where it sold for 36 cents, was 1½ cents. This is 4.2 per cent of the price paid by the

consumer. Of chicken from the Minnesota farm to Minneapolis, faster transportation consumed 7 per cent of the final price. Furthermore, these are transportation charges on commodities of a comparatively raw nature. On more highly finished goods I am confident that the transportation cost will be found still less important. On shoes, it is found ranging from ½ to 8/10 of 1 per cent of the retail selling price. Only in the case of shoes borne from Massachusetts to California is this cost found reaching 2 per cent.

Local transportation charges commonly known as delivery expense are usually a greater cost than the common carrier charges, but even in groceries has seldom been encountered a delivery expense greater than 3½ per cent. There is a department store in an unusual situation the delivery expense of which rises to 3½ per cent, but this is exceptional.

Dr. Weld's paper is suggestive not only in its content, but in the inductive method employed in piecing together facts from actual marketing operations. The general conclusion I gather from his paper is that the present organization for marketing is not accidental or parasitic. There are reasons for it, but it can probably be improved. The result of detailed study of individual commodities and methods of distribution will show where the present system may be improved. It is not likely that such study will indicate that remedy must be found in any destruction of existing facilities or their radical reconstruction. Those who have most thoroughly studied the problems of market distribution must concur in this program of intelligent adaptation. It is somewhat surprising to note Dr. Weld's statement that universities in our large cities have little realized the research opportunities at their very doors, and that but a very few of our state universities have begun the work. He makes no mention whatever of the work done by Harvard University in its research on the marketing of shoes and groceries. Nearly four years' work in contact with over 9000 members of each trade, shoe and grocery, in 28 states and Canada, the employment of 14 field agents in the last four summers, would seem to warrant the addition of at least one non-state university to the marketing research list.

Dr. Weld, however, was doubtless unconsciously thinking of research in the marketing of food products from the producer to the consumer, whereas the Harvard research has been almost wholly on the marketing of manufactured products from the manufacturer to the consumer. The Bureau of Business Research at Harvard

welcomes the opportunity to advise and to coöperate with similar research organizations which are coming into existence. Indeed, already it has enjoyed that privilege and trusts that it may serve a further movement toward coördination of effort in this most attractive field.

The field of marketing may be said roughly to have two main divisions, one on the side between the producer of raw material and the manufacturer, and the other on the side between the manufacturer and the ultimate consumer. Notable illustrations of research work in the first division are the egg bulletin of the University of Minnesota and the cheese bulletin of the University of Wisconsin. These food products are largely of the nature of raw materials and the consumer occupies a position in a rough way relative to that of a manufacturing user. The Harvard work has been almost entirely in the division of marketing between the manufacturer and consumer, and so far chiefly with the retailer, although now in shoes work with the wholesaler and with the manufacturer with or without a stock department is being done. The marketing of the hide from the cattle owner to the tanner, and to the shoe manufacturer, a great and important subject, has not been touched yet. In the study of the marketing of groceries, just begun in a large way last June, the Bureau may be sent back eventually in some degree to the original producer, although it is groceries that are being studied, provisions and dairy products only as they are carried by grocers.

A figure or two shows the field for study between the manufacturer and consumer. Forty per cent of the price paid for a pair of shoes is consumed in getting the shoes from the manufacturer to the consumer. Seventy per cent of the $1.50 paid for a certain scientific book does not reach the printer of that book. Similarly figures varying from 35 to 70 per cent could be given for clothing, hardware, and drugs.

Where the risk, be it of style or perishability, is less, the difference between the producer's price and the consumer's price is less, but even in groceries this difference ranges from 25 per cent to 40 per cent of the consumer's price. Whatever its explanation, the fact remains that between the manufacturers and consumers of many commodities a sum equal to from 30 to 40 per cent and more of what the consumer pays is added to the manufacturer's price. It was to explore this 40 per cent on shoes that work began with the shoe retailer in 1911. This work has already been

described in the AMERICAN ECONOMIC REVIEW for December, 1913, and still more fully in the Bureau's Bulletin Number 1, of May, 1913.

Dr. Weld found that 14 per cent of the final price of his pound of butter and 20 per cent of the price of his pound of chicken went to the retailer, and states that in general his investigations show that the gross profit of the retailer is nearly as large as all the intervening gross profits combined—in shoes it is much larger—and that this gross profit is not due to the high net profit of the retailer but to his high operating expense. This is also supported by the Bureau's experience in shoes. This does not seem necessarily unnatural, since possibly as in physics as the pipes of distribution become smaller the friction may increase geometrically.

The most important part of the results of the shoe research yet published is summarized in the following figures, which, though first based on the records of 130 retail shoe stores, were later not materially affected by returns from 650 stores in 26 states and Canada.

SUMMARY TABLE OF IMPORTANT FIGURES FROM THE RETAIL SHOE BUSINESS. (*Net Sales = 100 per cent.*)

| Item | Lowest per-cent-age | Highest per-cent-age | Percentage about which data center (not an average) | Percentage about which a concentration is sufficient to indicate a real-izable standard |
|---|---|---|---|---|
| Gross profit, including discounts | 20 | 42 | Low grade 23-25<br>High " 30-33 | |
| Total operating expense not including freight and cartage or interest | 18 | 35 | Low grade 23<br>High grade 27 | Low grade 20<br>High grade 25 |
| Buying expense | 0.8 | 1.8 | 1.1 | 1.0 |
| Salesforce | 5.0 | 10.3 | 8.0 | 7.0 |
| Advertising | 0.0 | 8.8 | 2.0 | 1.5 |
| Deliveries | 0.0 | 1.4 | 0.6 | 0.4 |
| Rent | 1.8 | 14.6 | 5.0 | 3.0 |
| Interest | 1.0 | 7.9 | 2.5 | 2.0 |
| Stock-turns, a year | 1.0 | 3.6 | 1.8 | 2.5 |
| Annual sales of average salesperson | $5,000 | $16,500 | $10,000 | |

The first two columns show the range in certain important figures of operation, the third column the mode of the whole group for each figure, and the fourth column the mode for an efficient group large enough to be significant.

It is seen that the gross profit ranges from 20 per cent to 42 per cent of the price to the consumer but centers about 23 to 25 per cent according to the grade of shoes sold. The total operating expense ranges from 18 per cent to 35 per cent, but centers about 23 to 27 per cent according to the grade of shoes. The true net profit was found to be surprisingly low. It frequently became a minus item when proper charges were made for interest and proprietor's time. The four items—salesforce, rent, interest, and advertising—comprise from two thirds to three fourths of the expense of the ordinary retail shoe stores. Other items are discussed in Bulletin Number 1. Two more significant items may be mentioned here—the annual sales of the average salesperson and stock-turn.

The annual sales of the average salesperson is one of the first tests of efficiency of a retail store. In the retail shoe business in a city of more than 100,000 population the average salesperson should sell $10,000 worth of footwear, at retail selling value. It has been surprising in other businesses to find this holding approximately true, whether the average unit of sale is 20 cents or two dollars. Where the rent is absolutely high, the sales of the average salesperson rise in accord with good Ricardian doctrine. For example, in great business thoroughfares like Broadway an average annual sales per salesperson of $16,500 was found, but this did not prevent the rent percentage from rising as high as 12.

Incidentally may it be said here that no apparent connection has been found between rent and advertising as some have argued. High rent percentages with low advertising percentages have been encountered, but in no marked degree more than high rent percentages with high advertising percentages.

The number of stock-turns in the retail shoe trade has been found ranging from one a year to 3.6 times, but centering about 1.8 times a year—surprisingly few. In the retail grocery business the number of stock-turns ranges from 12 to 20. There seems little question but that there has been a marked decrease in stock-turn in the retail shoe trade in the last seven years, and that this

is chiefly due to an increase of styles especially marked about 1908, when shoe manufacturers whose output became suddenly curtailed by the crisis of 1907 sought to increase their market by creating and pushing specialities. So sure about this does the Bureau feel that in the revised schedule for shoe retailers question 17 reads: "Give an approximate idea of the number of lasts and styles you carried your first year . . . . . . . ; in 1907. . . . . . . ; now. . . . . . ."

Increasing styles, lower stock-turn, increased capital, greater depreciation cost, mean higher operating expense. Shoe retailers with well operated businesses today claim to have operated at an expense of less than 10 per cent in the 80's. So confident is the Bureau that they cannot operate under 18 per cent now that our standing instructions to our field agents this last summer were to investigate carefully any operating expense under 18 per cent, first on the ground of error, and if no error was found then by all means to record the methods employed. A few were found.

Coöperative buying associations of retailers operating as wholesalers in both the shoe and grocery trades have been encountered. One such shoe association, which impressed us as being particularly well managed, was yet unable to purchase more than 40 per cent of the supply of any one of its members at wholesale rate because of the difference in the local market of each member.

A similar successful coöperative association of retail grocers by no means furnishes the equivalent of wholesale service to its members. Each has to pay cash, and to do his own delivering.

Much of the higher cost of living is undoubtedly due to better living or fancied better living, be it in the form of greater variety, change of styles, service, or what. We will not carry our packages again, or cease to order by telephone in any general way, any more than we will go back to the spinning wheel and candle. Such is not the teaching of economic history.

Still the fact remains that right in the present system of marketing has been discovered a variation of 17 per cent in the operating expense of retail shoe stores, and a variation in gross profit, which is cost to the consumer, of 22 per cent. A part of increased retail efficiency seems to go to the consumer in reduced prices, although it is hard to say in what degree. An improvement possible then in the marketing organization (and I agree with Dr. Meeker and Dr. Weld that there is no *one* reform) would seem to be in the retail end. What is the most efficient

practice for a retailer? Shall he buy from more or fewer sources? Shall these sources be manufacturers or wholesalers? How much stock shall he carry? How shall he determine it? In other words, cannot retailing be made more scientific and economical?

The figures so far published by the Harvard Bureau of Business Research has been preponderantly from cities. Furthermore, stores have not been sufficiently classified by kind. With the profit-and-loss statements of coöperators for January and February in, it is hoped there will be enough data to warrant tabulations on three main bases—the grade of business, the population of the community in which the store is located, and the annual net sales. Figures from over 200 chain stores, as well as those from department stores, will receive separate treatment.

These tabulations are expected to bring out some important facts. It is advanced in an entirely tentative fashion that they will show the small unit in retailing shoes to be the most efficient. It is likely to appear that a shoe store with yearly sales of about $50,000 may be the "representative firm," and furthermore that it is likely to be a one-store business. Department stores and even chain stores are not expected to make so favorable a showing.

In communities of less than 100,000, the rent percentage is expected to be distinctly less. Low grade businesses will show a still more marked reduction in operating expense as compared with high grade businesses. In the work now in progress with shoe wholesalers and manufacturers, some manufacturers who sell both through wholesalers and directly to retailers fortunately carry their stock department for retailers as if it were an independent wholesaler, so that valuable comparisons can be made between the costs of these respective methods of marketing. The grocery research began with retailers last June, and the introduction of a uniform system of accounts for retail grocers is proceeding. Already most striking differences between the grocery trade and the shoe trade are appearing in the figures and other data furnished.

This tremendous field of inviting research has been scarcely touched. A university is ideally suited for doing this work, because of its non-competing position and scientific attitude, and this is becoming more and more the opinion of the business world. In such a vast field there should be no duplication of research by government or universities, and furthermore such research as is done should dovetail with other research. To this end the Har-

vard Bureau of Business Research has corresponded with universities, and with federal and state bureaus which have inquired about the work, some of which are contemplating similar work, and has offered them the results of its experience. The Bureau has suggested that whoever goes into this research work intensively will need an accounting system, and for the sake of uniformity the Bureau hopes that its system of accounts will be considered, so that if possible the published results of all such research can be more accurately compared.

Arthur E. Swanson: Mr. Meeker's contention that our present transportation system with its community discrimination involves waste is valid, but I do not believe that such waste is a primary cause of the high marketing cost. The studies that have been made indicate that the transportation cost is small when compared with the cost of retailing and jobbing. While from 5 to 7 cents of the consumer's dollar is paid for transportation, 40 to 45 cents is paid for middlemen's services.

In regard to the advisability of establishing a flat postal rate as a remedy, in the marketing of perishable commodities, I disagree totally. In the first place, Mr. Meeker shows by the conclusion to his discussion of transportation that he hopes for a result from the flat rate which can be accomplished more economically and without any radical departure in rate making by a more extensive application of the cost of service principle. He anticipates his "Carping Critic" by stating that "the depreciation in quality of merchandise, insurance and interest charges would afford sufficient[1] obstacles in the shipment of commodities, especially perishable goods, to prevent their shipment across the continent to compete in the markets with the same products grown near at hand." Now, if that is the condition striven for, why have the flat postal rate? If the flat rate would actually result in the condition Mr. Meeker describes, how would the consumer be benefited? Would not the flat rate tend to increase the cost of transportation to the nearby producer, for the reason that the rate would have to be high enough to cover the transportation cost of distant producers.

The flat rate would operate more to the advantage of the consumer than would the cost of service rate only if the distant communities could compete effectively with nearby producers without restricting the output of the latter.

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If, however, the flat rate would operate to draw goods from distant communities, it would tax the nearby producer in favor of those more distant. The effect that this would have on "community" industries is apparent.

The flat postal rate departs from the only economic principles which we have to serve as guides in rate making, namely, the cost-of-service principle and the principle of comparative costs. For in rate making, the application of the cost of service principle results in a proportionate application of the comparative cost principle. It is true that the cost of service has not governed rate making in the past, and that it cannot be the sole guide in the future, but I do think that the greatest economy will result from a closer and more consistent approximation to the cost of service in rate making. This would make marketing cost a part of the production cost of a community, and apply more rigidly than ever the principle of comparative costs.

Regarding the economic organization of producers on a coöperative basis, I am in accord with Mr. Meeker. Such organization of producers will facilitate the standardization of grades and packing, the coördination of supply and demand in the various markets, the dissemination of market information, and the like, all of which will tend to eliminate waste.

It will take some time, however, to organize even a small proportion of the independent American farmers in coöperative societies, and in the meantime, I believe that the national government should continue with even greater vigor its proposed program of establishing market grades and standards, developing a market news service, and facilitating the organization of coöperative societies.

With Mr. Meeker's conclusions in regard to the parcel post, public markets, improved terminal and storage facilities, and the utilization of street railways for the transportation of commodities, I am in substantial agreement.

Mr. Weld, in his very excellent paper, points out that the retail store takes nearly as large a margin as that taken by all the other middlemen, including railroads, but he discusses the marketing problems as they present themselves under the present system of retailing. His justification of the subdivision of marketing into successive steps, as applying the principle of the division of labor and specialization, rests on the assumption that the present

retailing system is to be regarded as permanent. My study of retailing leads me to believe that the present system of retailing is one of the primary causes of the high marketing cost, which also accentuates other merchandising problems.

A very fundamental weakness in our present retailing system is the small size of the individual retailing unit. I am aware that very small retail shops are operating on a very low margin of gross profit because they have low administrative, rent, bad debt, and delivery charges, but these shops serve mainly those people who demand very little service or who depend upon these shops only for incidental accommodations. The ordinary retail store of today is too small to avail itself of the great cost-reducing principle of mass production. It cannot economize by large buying without reducing its number of stock turn-overs.

An estimate based on the budgetary study by the United States Department of Labor, 1901, on the rise in price of food since that time and on the number of stores selling food products in Chicago, places the average annual sales of retail food stores in that city at a little over $25,000. I have checked this estimate and have found that very successful retail stores have sales as low as $60,000 a year.

The chain store appears to solve the problem of economy in buying without sacrificing the location and convenience factor, so important in retail merchandising. It has had a number of administrative and financial difficulties to overcome, but after a long period of experimentation these are being solved, as is evidenced by the steady increase in the number of chain stores during the past two decades. The great increase indicates that economies can be effected in retailing.

The chain stores can economize by large buying direct from producers without reducing the number of stock turn-overs. They can also economize by standardizing their stock and service. Delivery expense can be reduced provided a chain is located in one community because consumers' orders for staples can be exchanged. The prevalence of the chain store system would tend to reduce the successive steps in marketing and to reduce the number of individual units in each step. The profits of individual retailers are not large, but the profits in the aggregate are. By reducing the number of successive steps and by reducing the number of middlemen, the aggregate profits will be reduced.

It seems inevitable that the demand for economy will introduce

the chain system or some other retailing organizations capable of utilizing the 'mass production' principle more extensively in the future. With this may come a tendency toward monopoly. It may well be that the consumer will not be in a position to benefit materially by this increased economy without finally organizing these systems on a coöperative basis.

In conclusion I wish to emphasize with the principal speakers the fact that marketing is a complex problem which requires study from many different angles.

Clyde Lyndon King: One basic element in minimum distribution costs, particularly of fruits and vegetables, has not been emphasized in either of the main papers, and that is the need for the standardization of farm produce and of containers.

Nature has already done much to standardize products, provided she be encouraged by careful and scientific choice of seeds. A leading seed firm in a recent prospectus states that "50 per cent of the seeds that are now being sold to our gardeners come from inferior stocks." The standardization of seeds and the standardization of growing processes can readily give us a standard product, and this standardized product can have definite, reliable grades of national significance, intelligible to growers and buyers in all sections of the country. Thus the grades of corn, wheat, and other grains have already been standardized to such an extent at least that the national government can now come in and adopt standards that mean the same thing the country over. But little has been done, however, toward national standardization in fruits, and practically nothing has been done toward either national or local standardization of vegetables.

Of as great importance to minimum marketing costs is the standardization of containers. This applies with particular force necessarily to vegetables and fruits. So long as beans are marketed in the bushel hamper, in the 5/8 bushel basket, in barrels, half barrels, bushel boxes, 1/3 bushel boxes, the gallon and its small divisions, box crates, hamper baskets of 28 quarts and 1 1/4 bushel capacity, and occasionally, as in New York, in the 32-quart berry crates; so long as beets are marketed in the bushel hamper, fractional bushel baskets, stave baskets, baskets of greater than a bushel capacity, standard barrels and their fractions and in 32-quart crates; so long as lettuce is marketed in the bushel

hamper, the 5/8 bushel basket, in lettuce crates of all sizes and denominations, in round stave baskets, hamper baskets of 28 and 40-quart capacities, and in barrels and baskets of all sizes; so long as tomatoes are shipped in bushel hampers, in 5/8 bushel baskets, fractional bushel baskets, two-quart baskets, or in four-basket crates as may fit the imagination or tradition of the grower; so long as there is such heterogeneity as this in containers even in the same locality, let alone in the same state or primary market; so long as no one container is typical for any one product on any one market,—just so long will it be impossible for the retailer or other buyer or seller to know how much or what grade he is ordering. Just so long as such conditions persist, marketing methods can only be hit-and-miss guesses all along the line. To approach accuracy, to make produce available, to make prompt ordering possible, to facilitate sales, to conserve space in carriers and in storage, attention must first be given to the standardization of containers.

This need was definitely brought out in the answers to certain questions recently submitted by the author to the 246 members of the Vegetable Growers' Association. These growers not only recognized the utter want of similarity in containers in the various markets and in the same market, but pointed definitely to the advantages of standardization of containers. Some of the advantages mentioned were: lowering of costs, convenience of handling, saving of time, producer and consumer know what they are giving and getting, goods are more wisely handled, there is more satisfaction, buying and selling are made easier, one price would then be possible for each grade of goods. In general these growers recommended three methods by which standardization could be attained: use of labels, legislation, and coöperation.

With such standard containers and products, and with the responsibility for living up to these standards squarely placed upon the growers, many needless risks in sorting and packing by wholesalers, and jobbers, would be eliminated. Retailers could then buy with greater accuracy and with better results, and the consumer would benefit through more stable and lower prices.

A second fact that has not received the attention it deserves is the reorganization of marketing methods now going on among growers, and among the chain of business men from producer to consumer. The rampant asseverations of the past few years as

to the unnecessarily high cost of food distribution have at least had the very happy result of putting into the minds of farmers and all middlemen questions as to just what their actual marketing costs are at each stage in the distribution process and whether and how these costs can be lowered. The farmers and business men generally, therefore, have of late been reorganizing to a greater or less extent their own buying and sales methods. This is particularly true of those concerned with the growing and marketing of vegetables and fruits, the sales agencies as well as the markets of grain having been fairly well standardized.

The reorganization of the market is therefore not an ideal merely to be hoped for. It is a force already with us. Fifty-seven reasons can easily be summoned to prove that what is in the distribution system is right, but happily the big fact is that as many business forces are now at work revamping and reorganizing our distribution system. Thus vegetable and fruit growers particularly are watching prices at every step in the distribution process with a view to adapting their sales methods to maximum returns and of selling at the point where such returns are assured. Of the 138 vegetable growers in the United States who answered the author's query as to whether they sold to local purchasers, cash-buying jobbers, retailers, or consumers, 39 answered that they sold to wholesalers on consignment, 30 to cash-buying jobbers, 31 to local purchasers, 51 to retailers, and 22 to consumers. That is, one-half of these growers sold either to retailers or consumers. Nor are these growers limiting themselves to any one of these five outlets for their goods. Thus, of the 138 who responded, 17 sold to all five, that is, to wholesalers on consignment, cash-buying jobbers, local purchasers, the retailer and the consumer. Seven more sold to wholesalers, cash-buying jobbers, local purchasers and retailers. Others sold to three or more of these.

Nor are the growers alone the only class of business men who are organizing their purchasing and selling methods. The wholesaler is turning jobber. He is sending his automobile direct to the farm and is selling direct to the retailer. The jobber is buying direct from the farm and is selling direct to the retailer. The chain store is combining within its organization practically all of the various steps in the distribution process. Retailers, through coöperative organizations and through the dissemination of knowledge of how and when to buy, are buying much more directly and

efficiently than ever before. Consumers, whether through coöperative organizations or through extended knowledge as to food values and food products, daily buy more intelligently.

The science of marketing and of minimum distribution costs alike require the securing and dissemination of reliable information. We have now reached the point where there is urgent need for city, state, and national market bureaus that will go "hob-nailed" and not "pussy-foot" in securing and giving out the facts needed for sane buying and selling on the part of all. The national market bureau, in ascertaining the areas where the standard fruits are most largely grown, and the markets for these respective areas, is laying a splendid foundation for a real science in marketing and for minimum distribution costs. The New York State Food and Market Bureau, recently created, likewise offers valuable suggestions as to what can be done in the future to give to growers and purchasers the information needed to reach the best markets at the best prices. The public auctioneer plan, recently authorized by a proposed statute applicable to New York City, and the usefulness of which has been demonstrated in continental cities beyond a measure of doubt, offers an avenue for direct sales of standard products in standard containers that bids fair to revolutionize the character of products grown and the marketing methods used by growers near all large cities. Suggestions as to the endless possibilities in the education of the consumer are the pamphlets now being issued by Mayor Mitchell's Food Supply Committee of New York City. These pamphlets instruct housewives in such every day matters as how to cook fish. As part of this general scheme comes in the much abused parcels post, shipment by hamper, and the public market. Taken in and by themselves, these schemes do not appear to offer propitious possibilities for feeding the fifty million urban and suburban residents in this country, but taken as a whole, together with the other tendencies herein indicated, they constitute a very valuable and formidable check upon the maximum price of farm produce.

Such are some of the typical forces now at work in the reorganization of markets. With such an inclusive and well supported view of the marketing system before us as that so ably and reliably outlined by Professor Weld, it is not relatively worth while as yet to give serious consideration to a proposal for "postage stamp"

railway rates, or to a proposition to build up a protective wall around each of the local communities by making distance rates proportionately higher. The initial cost of hauling from farm to shipping station alone makes both these questions sink into relative insignificance. The fact is that the Kansas farmer today is nearer the Philadelphia market than the Pennsylvania farmer of twenty-five years ago who lived in sight of the spires of that city's churches. For all intents and purposes, the relative cost of distance shipments is relatively inconsiderable as compared with the cost of hauling from farm to shipping point. And, on the other hand, this initial cost is so great as to render not only futile but very harmful any attempt to give to the local agricultural community higher prices from nearby urban dwellers through raising rates to more distant points.

Without any change in our general scheme of railway rates, without any brief either for or against any one of the existing types of middlemen, without deciding whether efficiency in marketing means more middlemen or fewer middlemen, the forces that are now at work in the reorganization of marketing methods through lowering costs to each and every business man interested therein will ultimately place marketing in this country on an exact, scientific basis. This means assistance to farmers and country buyers through dissemination of the needed marketing information, assistance to wholesalers and jobbers, through adequate terminal and wholesale facilities, assistance to retailers and consumers through reliable information, all of which can be secured with maximum social efficiency only through well organized market bureaus in city, state, and nation.

J. Russell Smith: Professor Lauman's final dismissal of the parcel post as a medium of marketing products from farm producer to city consumer was perhaps made too soon. Parcel post is very young yet, and it takes things a long while to develop. The parcel post is closely associated with the matter of standardization of packages, and I hope that we may hear Dr. Carver answer his own question as to the desirability of inspection of standard packages, as we now have inspection of standard weights and measures.

Personally I believe that such inspection should come, and when this process of standardization has gone forward, then the parcel

post may render an important service. Personally I should like to buy packages of pecans and other nuts if I knew what I was buying. As it is, I am afraid to buy them anywhere because of my experience in buying pecans that stick to the shell and would not come out easily. Similarly, I am afraid to buy a barrel of apples without I know the brand. Similarly, in laying in my stock of potatoes for the winter I had to do my own sampling to find out whether they were soggy or mealy. I should not have had to do this. There is no physical reason why packages of potatoes, fruit, many perishable vegetables, nuts, etc., may not be standardized, and when standardized, shipped in many cases by parcel post. But standardization is the next and indeed the first step.

HENRY C. EMERY: I have taken so much of your time already in the morning session that I should apoligize for rising again. I cannot resist, however, asking for a few minutes because of the great interest with which I listened to this discussion. My interest is due to two facts. In the first place, years ago I came to the conclusion that our whole theory of price, as elaborated in our economic treatises, gives such an imperfect explanation of the way in which prices are actually made in the market as to be almost useless. The problem of the margin between consumer's price and the producer's price, and the problem of the different prices charged to different consumers for exactly the same thing seem to me the most important problem in our fabric of economic theory.

The second reason is because of my own experience in connection with the Tariff Board for three years in Washington. We collected there a large amount of material, both as to prices and costs. I well remember that as each table was brought up from downstairs to my desk it was frequently handed over with the comment, "Here is one more argument for consumers' coöperation."

Such remarks were in a sense humorous, but were made to emphasize the way in which the fact was being more and more impressed upon the whole force there that a fundamental factor in our problem was a study of the gap between consumers' price and producers' price. In fact, I think most of us came to the conclusion that a large amount of theorizing on the tariff was useless, due to the fact that economists have failed to recognize the existence of a large number of different prices. They have talked about

the price of corn in Poland and the price of linen in Ireland as if either of these were a single and determinable factor. The fact, of course, is that there is a mill price, a jobbers' price, a wholesalers' price, and a retailers' price, to say nothing of the fact that there may be a considerable difference in actual retail prices in two adjoining stores. For example, we found that in a considerable number of commoner grades of cotton dress goods these goods sold actually cheaper in the United States *at the mill* than in England. On the other hand, they would be sold to the American consumer at a higher price than to the English consumer. In some cases the price would be slightly higher; in other cases greatly higher, according to marketing methods, the custom of set prices, or traditions of one kind or another. Thus it might be that in one such case a 20 per cent change in the tariff would mean nothing to the consumer, while in another case a 5 per cent reduction might mean much.

I arose, however, to give one important injunction to this group of younger economists who have done such excellent work in studying these problems. Recognizing the fundamental importance of their study, both for economic theory and for the determination of such practical problems as the effects of tariff rates, it is essential for them to remember that much of this good work will be completely nullified if they should make the mistake of starting out to find any one superior system or method of marketing. What our experience at Washington taught us was the fact that what is true of an "organdie" is not necessarily true of a "dotted swiss," so far as producers' and consumers' prices are concerned, even if the same system of marketing is adopted. The same must hold true regarding goods in any line.

We have all been making the mistake of talking about such things as "cotton dress goods" or "shoes," as if either of these were a single commodity about which sweeping assertions could be made. Some goods can be handled with least waste by the small, independent retailer; some by chain stores controlled by manufacturers; some by coöperative chain stores. Some goods can be handled economically by parcel post; some cannot. Some goods can be standardized; some cannot be standardized. Some can be standardized for one purpose, but not for another. Some goods will be sold by grade, some goods by sample. Indeed the same goods will be sold by grade for one purpose and by sample for another. All

these complexities must be recognized. There is no single method, no one perfect system of marketing, even in the case of the same line of goods. I emphasize these facts for fear that by not keeping them clearly in mind the true value of the important work which is now being done in this field may be seriously impaired.

JOHN LEE COULTER: Some ten years ago when I first started to study the problems of marketing farm products and, indeed, the problems of marketing in general, I found it difficult to secure any printed article or other contribution on the subject. The progress during the last ten years has been marvelous and certainly should be encouraging to all of us. I rise to suggest only one important consideration which all of us should keep in mind. It is such a new field and the data collected are so important that each one engaged in making an investigation should bear in mind not only his own interests, but the needs, interests, and wishes of all of us. In doing this there is one fundamental principle which should be kept constantly in mind when studying the cost of marketing, and this is the great variation which is found not only in the cost of marketing the same product at different seasons of the year, but different products at the same season of the year, and also the differences in the cost as between individual marketing agents. Variations in efficiency are something perfectly wonderful. All of you who have been conducting investigations recognize this. An inefficient marketing agent may be making very little profit and the cost of doing business may be very great, even 40 or 50 per cent, while, on the other hand an efficient marketing agent may be accumulating immense amounts while taking a margin of only 20 or 25 per cent. Bearing this in mind it is of the greatest importance to all of us that investigators keep separate the information showing the seasons of the year, the exact types of goods and facts for different marketing agents.

There is one other matter in this connection which might well be referred to, though I do not wish to take more than a minute of your time. Reference has been made from time to time to the holding of a product over from the wrong time (time when it is not wanted) until the right time (the time when it is wanted). This, of course, is the whole storage problem, and includes not only warehousing such as is found in the case of cotton, wheat, etc., but also cold storage. I desire to attract your attention to another

method of creating time utility, and yet the method to which I refer has probably generally been thought of as belonging to an entirely different category. I have in mind the time of agricultural production to suit the market. Thus, it may cost the farmer one dollar to produce a certain quantity of a certain product for the use of the consumer on the first day of June. But the farmer discovers a demand for the same product on the first day of May. He may find it possible to produce the same quantity of the same article for delivery on the first day of May but it may cost him $1.10. The question arises in my mind whether this additional ten cents should not be considered as the cost of giving to the article time usefulness.

There are large numbers of related problems which have come to my mind and which I have studied during the last ten years but I shall not try to bring them before you at this time. I think that we owe a great deal to those who are making such intensive and useful studies in this field.